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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,161

03/26/2004

Jason McKittrick

VEC-100-A (RUS0152)

8348

29296

7590

02/20/2009

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EXAMINER

KOEHLER, CHRISTOPHER M

ART UNIT

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3726

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,161	<b>Applicant(s)</b> MCKITTRICK ET AL.	
	<b>Examiner</b> Christopher M. Koehler	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-24 and 29-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 29, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kameoka (JP 05-272889, submitted by applicant).

#### **Claim 29:**

Kameoka teaches a method for making a heat exchanger tank assembly (figure 4) comprising manufacturing a one-piece double baffle (29, figures 5 and 6) comprising a tab (29a) at an area of insertion (inserted through 32) and bend on the double baffle, the double baffle having peripheral walls (30, 31) that form a central chamber; providing a heat exchanger end tank (12a, 12b) which comprises a contact area comprising a deformation, perforation, slot or other shaped mating hole (32) for insertion of the tab (29a) of the double baffle; providing a relief means (32a) orientated such that after assembly the relief means is located contiguous with or through the thickness of the tab (figure 5); aligning the tab of the baffle and the end tank contact area so that the tab may be inserted into the contact area (figures 5 and 6); inserting the one-piece double baffle in the end tank at the contact area of the end tank (figures 5 and 6); providing the remainder of the heat exchanger tank assembly (12b) on the side of the one-piece double baffle that is opposite the end tank; and applying a sealing technique such that

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the double baffle remains in place after the assembly process and the completed heat exchanger assembly may be used in automotive applications (see paragraph [0028] of machine translation).

Claims 31 and 33:

Kameoka teaches that the relief means in the end tank is at a location contiguous with the tab (figure 5) and that the one-piece double baffle is formed from one continuous piece of material (29, figure 6).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kameoka.

Claims 30 and 32:

Kameoka teaches forming the relief means in the end tank at a location contiguous with the tab but not through the thickness of the tab. At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have formed the relief means through the thickness of the tab because applicant has not disclosed that such a relief means provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with

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either the relief means taught by Kameoka or the claimed relief means because either performs the same function of indicating leaks equally well. Therefore, it would have been an obvious matter of design choice to modify Kameoka to obtain the invention specified in claims 30 and 32.

5. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kameoka in view of Bonnet (US 2004/0251015).

Claim 21:

Kameoka teaches a method for making a heat exchanger tank assembly (figure 4) comprising, manufacturing a one-piece double baffle (29) folded so that the one-piece double baffle includes at least two baffle profiles (30, 31) roughly parallel to each other and a tab (29a) at an area of insertion, fold or bend on the double baffle having peripheral walls (30, 31) that form a central chamber between the peripheral walls of the one-piece double baffle after brazing the heat exchanger (paragraph [0028]), the tab being operatively configured to be received within an aperture (32) of a heat exchanger end tank (12a, 12b); providing the heat exchanger end tank (12a) which comprises a contact area comprising the aperture, a deformation, perforation, slot or other shaped mating hole (32) for insertion of the tab (29a) of the double baffle (29), and an interior side distal the contact area; aligning the tab of the baffle and the end tank contact area so that the tab may be inserted into the contact area once the baffle has been disposed between the end tank contact area and a remainder of the heat exchanger (figures 5 and 6); inserting the tab one-piece double baffle in the end tank at the contact area of the end tank (figure 6); and applying a sealing technique such that the double baffle

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remains in place after the assembly process and the completed heat exchanger assembly may be used in automotive applications (paragraph [0028]).

Kameoka does not explicitly teach that when assembled the central chamber width between the walls of the double baffle is larger near the contact area of the end tank than at the interior side.

Bonnet teaches a double baffle (6) for use in a heat exchanger (abstract) wherein when assembled the central chamber width between the walls of the double baffle is larger near the contact areas than at the interior sides (figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the baffle larger in the contact areas in order to move any leaked fluid closer to the relief means rather than storing it in the center of the baffle.

Claim 22:

Kameoka teaches extending the tab (29a) through the wall (30) of the end tank, thereby securing its position and forming a seal (paragraph [0028]).

Claim 23:

Kameoka teaches forming the seal so that it is essentially leak-tight (paragraph [0028])

Claim 24:

Kameoka teaches that each of the at least two baffle profiles has a common central portion and forming a chamber portion, the baffle profiles being basically perpendicular to the tank wall surface (figures 5 and 6).

***Response to Arguments***

6. Applicant's arguments with respect to claims 21-24 and 29-33 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571)272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermie E Cozart/  
Primary Examiner, Art Unit 3726

/C. M. K./  
Examiner, Art Unit 3726